THE U.S. DEPARTMENT OF ENERGY

OFFICE OF TRANSPORTATION TECHNOLOGIES

NATIONAL ALTERNATIVE FUELS HOTLINE

NATURAL GAS RESOURCE GUIDE

FOR ADDITIONAL INFORMATION CONTACT THE NATIONAL ALTERNATIVE FUELS HOTLINE

UPDATED: JUNE 29, 1998

PHONE: 800-423-1DOE LOCAL/INTERNATIONAL: 703-934-3069

FAX: 703-934-3183

EMAIL: hotline@afdc.nrel.gov

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I. ADSORBED NATURAL GAS

Brookhaven National Laboratory

Department of Applied Science
Building 815 M, Upton, NY 11973
Contact: James Wegerzin
Phone: 516-344-7917

Fax: 516-344-5526

Atlanta Gas Light Adsorbent Research Group

235 Peach Tree Street, N.E.

P.O. Box 4569, Atlanta, GA 30302

Contact: Doug Horne, Director for

Research & Development

Phone: 404-584-4802 **Fax:** 404-584-4807

Contact: Terry Cook, Program Manager

Phone: 404-584-4806 **Fax:** 404-584-4807

U.S. Department of Energy

1000 Independence Ave, S.W.

Washington, DC 20585

Contact: Michael Gurevich, Program

Manager

Phone: 202-586-6104 **Fax:** 202-586-9815

II. ASSOCIATIONS

Canadian Gas Association

243 Consumers Rd, Suite 1200

North York, ON CANADA M2J 5E3

Contact: Ed Cartright,

Community Relations Barbara Cayley, Librarian

Phone: 416-498-1994 **Fax:** 416-498-7465

The CGA focus is to develop the Canadian market for NGVs. The association provides a forum for discussion with government agencies with an interest in the NGV market.

Canadian Gas Research Institute

55 Scarsdale Road

Don Mills ON, CANADA M3B2R3

Contact: Drive Shahrazed Rahbar,

Engineer

Phone: 416-447-6661 **Fax:** 416-447-6757

Compressed Gas Association

Crystal Square 2

1725 Jefferson Davis Highway

Suite 1004

Arlington, VA 22202-4102

Contact: Carl T. Johnson, President 703-412-0900 ext. 712

Toll Free: 800-U-ASK-CGA **Fax:** 703-412-0128

Provides technical information and safety standards for storage, transportation and distribution of natural gas.

Gas Research Institute

8600 Bryn Mawr Avenue

Chicago, IL 60631

Contact: Rajeana Gable

Group Manager

Phone: 773-399-8321 **Fax:** 773-399-8170

Research and development management organization for the natural gas industry. GRI's work includes developing advanced, cost-effective natural gas engines and vehicles, as well as enabling technology such as on-board storage and refueling equipment. GRI's objective is to increase the value of gas energy service to the industry and its customers.

Institute of Gas Technology

4201 West 36th Street Chicago, IL 60632

Contact: Christopher Blazek

President

Phone: 773-890-6400 **Fax:** 773-890-6460

Provides research, development, demonstration projects and consulting to the NGV industry and government. This includes CNG and LNG vehicle systems, refueling stations, storage, economics, data collection, and marketing research.

Natural Gas Vehicle Coalition

1515 Wilson Boulevard, Suite 1030

Arlington, VA 22209

Contact: Rich Kolodziej

President

Phone: 703-527-3022 **Fax:** 703-527-3025

The Natural Gas Vehicle Coalition is a national trade association committed to developing profitable, long-term markets for natural gas vehicles. Member organizations include natural gas distribution companies, pipelines, producers, NGV equipment suppliers, non-profit organizations and governmental agencies.

Natural Gas Vehicle Producers Association

113 South West Street, 4th Floor

Alexandria, VA 22314

Contact: Wayne Smith, Managing Director

Phone: 703-838-2941 **Fax:** 703-838-2950

Society of Automotive Engineers (SAE)

258 Sun Ridge Drive Freedom PA 15042

Contact: David DuBois, Staff Engineer

Phone: 724-772-7159 **Fax:** 724-776-0243

Organization of professional engineers who establish standards for the automotive industry. Publishes technical studies and is a clearinghouse for technical resources.

III. DATABASES

Alternative Fuels Data Center

9300 Lee Highway Fairfax VA 22031-1207

Contact: National Alternative Fuels Hotline

Phone: 800-423-1363

Local: 703-934-3069

Fax: 703-934-3183

Email: hotline@afdc.nrel.gov
Website: www.afdc.doe.gov

Accessible via the World Wide Web, the AFDC

provides information about each of the alternative fuels. Including a searchable data base for documents, refueling sites, vehicle emission data and incentives for purchasing Alternative Fuel Vehicles.

Natural Gas Vehicle Safety Data Base

Science Applications International Corp. 1710 Goodridge Drive, T-2-7-2

McLean, VA 22102

Contact: David M. Friedman 703-821-4559 **Fax:** 703-893-2187

Motor Fuels Information Center

Information Resources, Inc.

1925 North Lynn Street, Suite 1000

Arlington, VA 22209

Contact: David Holt

Director, Legislative & Regulatory Affairs

Phone: 703-528-2500 **Fax:** 703-528-1603

Email: david.holt@motorfuels.com

Website: www.motorfuels.com

Accessible via the World Wide Web, MFIC is a comprehensive database on motor fuels. MFIC contains complete listings of state and federal legislation as well as up-to-date information on alternate fuels. This is a paid subscription service.

IV. DIRECTORIES

NGV Resource Guide

RP Publishing, Inc.

1410 Grant Street, Suite B203

Denver, CO 80203-9784

Contact: Ellen Pollock

Editor

Phone: 303-863-0521 **Fax:** 303-863-1722

The NGV Resource Guide is an annual directory containing lists of suppliers, manufacturers and service providers to the natural gas vehicle industry. This publication also includes maps and an overview of current alternative fuel legislation, as well as market forecasts and economic trends.

V. FUNDING/INCENTIVES

FEDERAL TAX CREDITS/DEDUCTIONS

Title 19 of The Energy Policy Act of 1992 (EPACT) outlines tax deductions for qualified alternative fuel vehicles. Deductions are broken down by weight and types of vehicles, and are as follows:

Truck or van (GVW 10,000 - 26,000 lb.): \$5,000
Truck or van (GVW more than 26,000 lb.): 50,000
Buses (seating capacity of 20+): \$50,000

All other vehicles:

\$2.000*

*(Off-road vehicles, e.g. forklifts, not included)

The tax credit for qualified electric vehicles is 10% of the cost of the vehicles or \$4,000, whichever is lower. These amounts shall be reduced according to the following schedule: 2002: 25% reduction; 2003: 50% reduction; and 2004: 75% reduction. These deductions and credits are available after 12/20/93 through 12/31/04 (2004).

Tax deductions for qualified clean-fuel vehicle refueling properties shall not exceed \$100,000 for property placed in service by the taxpayer in the taxable year or preceding taxable years. Deductions are available from 6/30/93 through 12/31/04.

Internal Revenue Service

1111 Constitution Ave, NW Washington, DC 20224

Contact: Winston Douglas,

Alternative Fuels Tax Provisions

Phone: 202-622-3110 Order Desk: 800-829-3676

(ask for Pub #535, Alternative Fuel Vehicle Tax

Deduction Booklet)

STATE AND FEDERAL PROGRAMS

For information on state programs, contact your State Energy Office. Phone numbers and contacts for these offices are provided in *The Guide to Alternative Fuel Vehicle Incentives and Laws*, available through the National Alternative Fuels Hotline (See page 2). This guide summarizes federal and state laws, regulations and incentives.

VEHICLE CREDITS AND CREDIT TRADING

Section 508, Title V of EPACT provides credits for fleet owners who purchase AFVs earlier or in greater quantities than required in the act. One credit is obtained for each AFV that a fleet owner purchases beyond the requirements. The credits are transferable and there are no restrictions on where the credits can be traded. DOE is working to develop a credit trading

database. For further information, contact the National Alternative Fuels Hotline.

VI. GOVERNMENT CONTACTS

Energy Information Administration (EIA)

National Energy Information Center

Washington, DC 20585 **Phone:** 202-586-8800 **Fax:** 202-586-1076

Email: infoctr@eia.doe.gov

Offers a listing of documents published by EIA and its various offices such as the National Technical Information Service (NTIS) and the National Energy Information Center (NEIC). This is a valuable source for energy statistics.

National Renewable Energy Laboratory

1617 Cole Boulevard

Mail Stop 16/3

Golden, CO 80401-3393

Contact: Paul Norton

Project Engineer

Phone: 303-275-4424 **Fax:** 303-275-4415

Email: nortonp@tcplink.nrel.gov

Website: www.afdc.doe.gov

U.S. Department of Energy Office of Heavy Vehicle Technologies

1000 Independence Ave, SW Washington, DC 20585-0121 **Contact:** Richard Wares,

Transit Bus Program Manager

Phone: 202-586-8031 **Fax:** 202-586-9815

U.S. Environmental Protection Agency National Vehicle & Fuel Emissions Laboratory

2000 Traverwood, Ann Arbor, MI 48105

Contact: Debbie Addler

Environmental Scientist

Phone: 734-214-4223 Fax: 734-214-4051 VII. PERIODICALS

Clean Fuel Vehicle Week

Energy West Publishers 1709 Salvador Ave

San Clemente, CA 92672

Subscription Rate: \$445/year, \$625/year Phone: 714-492-1340

Fax: 714-492-6556

Frequency: Weekly

Email: energywe@deltanet.com **Website:** www.energywest.com

Available by mail or fax, Clean Fuel Vehicle Week provides information on vehicles fueled by natural gas and other alternative and new fuels.

LNG Express

Zeus Development Corporation 2424 Wilcrest Drive, Suite 240, P.O. Box 272505 Houston, TX 77277-2500

Subscription: \$225/year

Contact: Dan McKay, Editor Phone: 713-952-9500 Fax: 713-952-9526 Frequency: Bi-monthly

Reports on current activities relating to liquefied natural gas (LNG).

Natural Gas Fuels

RP Publishing, Inc. 1410 Grant Street, Suite B203 Denver, CO 80203-9784

Subscription: Free

Contact: Ellen Pollock, Editor

Phone: 303-863-0521 **Fax:** 303-863-1772

Frequency: Monthly

A magazine dedicated to the use of natural gas as a vehicle fuel, *Natural Gas Fuels* is written especially for fleet owners, local distribution companies, manufacturers and suppliers of NGV equipment and services.

Natural Gas Vehicle

American Gas Association

1515 Wilson Boulevard, Arlington, VA 22209

Subscription Rate: \$192/year for

non-members

Phone: 703-841-8400 **Fax:** 703-841-8689 **Frequency:** Bi-monthly

NGV News

Pasha Publications

1616 North Fort Myer Drive, Suite 1000

Arlington, VA 22209

Subscription Rate: \$247/year Phone: 800-424-2908

Frequency: Monthly

New Fuels Report

Inside Washington Publishers Ben Franklin Station, P.O. Box 7167

Washington, DC 20044 **Phone:** 800-424-9068

Local: 703-416-8500

Fax: 703-416-8543

Frequency: Weekly

Reports worldwide on oxygenates, alcohols and other alternative fuels.

VIII. SAFETY STANDARDS

National Fire Protection Association

Contact: Ted LeMoff,

Senior Gases Engineer

Phone: 617-770-3000 x3434

Order Desk: 800-344-3555

The NFPA provides safety standards for natural gas storage, handling, and transportation. The following standards apply to natural gas:

NFPA 52: Compressed Natural Gas Vehicular Fueling Systems: A Guide to the Design and Installation of CNG Fuel Systems

NFPA 57: Liquefied Natural Gas

Vehicular Fuel Systems

NFPA 170: Fire Safety Symbols

Compressed Gas Association

Crystal Square 2, 1725 Jefferson Davis Highway Suite 1004, Arlington, VA

22202-4102

Contact: Carl T. Johnson, President 703-412-0900 ext. 712

Toll Free: 800-U-ASK-CGA **Fax:** 703-412-0128

Provides technical information and safety standards for storage, transportation and

distribution of natural gas.

IX. TANK MANUFACTURING & TESTING STANDARDS

Compressed natural gas fuel tanks must be manufactured under the following three types of standards:

U.S. Department of Transportation:

Standard #304: Federal standards for CNG storage tanks are contained in the final rule for CNG Fuel Container Integrity—Federal Register 49 CFR Part 571.

American National Standards Institute/American Gas Association NGV2:

NGV2 standards are available through the Natural Gas Vehicle Coalition. Tanks manufactured under NGV2 standards surpass NHTSA certification standards.

American Society of Mechanical Engineers:

Tanks that are built under ASME Code have a very high safety record. ASME Code requirements result in a much heavier tank, and are used primarily in heavy vehicles.

Testing Standards

The following are the current guidelines for testing natural gas fuel containers:

ANSI/AGA/NGV-2: Visual Inspection Standards for NGV Fuel Containers:

Sets visual inspection procedures and standards for fuel containers.

Contact: Bob DeReamer, Project Engineer

Phone: 216-524-4990

CGA C-6.4 Visual Inspection Guide

Describes visual inspection of NGV cylinders.

Contact: Compressed Gas Association

Phone: 703-412-0900 ext. 712

ASTM E0704/95-1

Acoustic method for on-board testing of NGV cylinders.

Contact: Jim Mitchell,

Director of Market Development

860-536-3380 Phone: Fax: 860-536-3380

National Highway Traffic Safety Administration

U.S. Department of Transportation 400 7th St. SW, Room 5307 Washington DC 20590

Contact: Charlie Holt Phone: 202-366-0247 Fax: 202-366-2739

Gas Research Institute

8600 West Bryr Mawr Avenue

Chicago, IL 60631

Contact: Steve Takagishi

Program Manager

Phone: 312-399-8215 Fax: 312-399-8369

Modern Engineering

15201 Commerce Drive, North,

Dearborn, MI 48121

Contact: Robert Childs

Program Manager

Phone: 313-317-9675 Fax: 313-336-7104

Composite Tanks

Composite tanks are molded fiberglass lined with carbon. These tanks are extremely lightweight (one quarter the weight of an aluminum tank), and can be molded into any shape to take up excess space. These tanks are currently available for purchase. For more information, please contact the Natural Gas Vehicle Coalition (See page 2).

X. VEHICLE MANUFACTURER

CONTACTS

American Honda

1919 Torrance Boulevard. Torrance, CA 90501

Contact: Steve Ellis, Manager

Alternative Fuels Task Force

Phone: 310-783-3987 310-781-4585 Fax:

Email: sellis@amerhonda.com

Chrysler Corporation

27777 Franklin Road. Southfield, MI 48034

Michael Clement, Manager Contact:

Alternative Fuel Vehicle Sales

Phone: 810-576-5472 Toll Free: 800-255-2616

Ford Motor Company

World Headquarters

The American Road, Room 255

Dearborn, MI 48121-1899

Contact: Tom Artushin, Manager

Ford Alternative Fuel Division

Phone: 313-446-9461 Toll Free: 800-ALT-FUEL

General Motors Corporation

3044 West Grand Boulevard,

Detroit, MI 48202

Contact: Gerald Barnes, Manager

Alternative Fuels Division

313-556-7723 Phone: